### SEQUENCE LISTING

<110> Consortium for electrochemical industry GmbH

<120> Feedback-resistent homoserine transsuccinglass

<130> CO10217

<140>

<141>

<160> 24

<170> PatentIn Ver. 2.0

<210> 1

<211> 930

<212> DNA

<213> Escherichia coli

<220>

<221> CDS

<222> (1)..(930)

<300>

<301> Blattner, F. R.

<302> The complete genome sequence of Escherichia coli K-12.

<303> Science

<304> 277

<305> 5331

<306> 1453-1474

<307> 1997

<400> 1

atg ccg att cgt gtg ccg gac gag cta ccc gcc gtc aat ttc ttg cgt 48

Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg

1 5 10 15

gaa gaa aac gtc ttt gtg atg aca act tct cgt gcg tct ggt cag gaa 96 Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu

20 25 30

att cgt cca ctt aag gtt ctg atc ctt aac ctg atg ccg aag aag att 144

Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile

35 40 45

gaa act gaa aat cag ttt ctg cgc ctg ctt tca aac tca cct ttg cag 192
Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
50 55 60

gtc gat att cag ctg ttg cgc atc gat tcc cgt gaa tcg cgc aac acg 240

Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr

65 70 75 80

ccc gca gag cat ctg aac aac ttc tac tgt aac ttt gaa gat att cag 288

Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln

85 90 95

gat cag aac ttt gac ggt ttg att gta act ggt gcg ccg ctg ggc ctg 336
Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu

							5/1									
			100				1	05				11	0			
gtg	gag	ttt	aat	gat	gtc	gct	tac	tgg	ccg	cag	atc	aaa	cag	gtg	ctg	384
Val	Glu	Phe	Asn	Asp	Val	Ala	Tyr	Trp	Pro	Gln	Ile	Lys	Gln	Val	Leu	
		115					120					125				
gag	tgg	tcg	aaa	gat	cac	gtc	acc	tcg	acg	ctg	ttt	gtc	tgc	tgg	gcg	432
Glu	Trp	Ser	Lys	Asp	His	Val	Thr	Ser	Thr	Leu	Phe	Val	Cys	Trp	Ala	
	130					135					140					
αta	caq	acc	aca	ctc	aat	atc	ctc	tac	ggc	att	cct	aaq	 caa	act	cgc	480
					Asn											
145					150			- 4	2	155		<b>-</b>			160	
143					150					133					100	
			,													520
					ggc											528
Thr	Glu	Lys	Leu		Gly	Val	Tyr	Glu		HIS	TTE	ьеи	HIS		HIS	
				165					170					175		
gcg	ctt	ctg	acg	cgt	ggc	ttt	gat	gat	tca	ttc	ctg	gca	ccg	cat	tcg	576
Ala	Leu	Leu	Thr	Arg	Gly	Phe	Asp	Asp	Ser	Phe	Leu	Ala	Pro	His	Ser	
			180	•				185					190			
													, .			
cgc	tat	gct	gac	ttt	ccg	gca	gcg	ttg	att	cgt	gat	tac	acc	gat	ctg	624
Arg	Tyr	Ala	Asp	Phe	Pro	Ala	Ala	Leu	Ile	Arg	Asp	Tyr	Thr	Asp	Leu	
		195					200					205				
gaa	att	ctg	gca	gag	acg	gaa	gaa	ggg	gat	gca	tat	ctg	ttt	gcc	agt	672
Glu	Ile	Leu	Ala	Glu	Thr	Glu	Glu	Gly	Asp	Ala	Tyr	Leu	Phe	Ala	Ser	
	210					215					220					

aaa	gat	aag	cgc	att	gcc	ttt	gtg	acg	ggc	cat	ccc	gaa	tat	gat	gcg	720
Lys	Asp	Lys	Arg	Ile	Ala	Phe	Val	Thr	Gly	His	Pro	Glu	Tyr	Asp	Ala	
225					230					235					240	
caa	acg	ctg	gcg	cag	gaa	ttt	ttc	cgc	gat	gtg	gaa	gcc	gga	cta	gac	768
Gln	Thr	Leu	Ala	Gln	Glu	Phe	Phe	Arg	Asp	Val	Glu	Ala	Gly	Leu	Asp	
				245					250					255		
													٠			
ccg	gat	gta	ccg	tat	aac	tat	ttc	ccg	cac	aat	gat	ccg	caa	aat	aca	816
Pro	Asp	Val	Pro	Tyr	Asn	Tyr	Phe	Pro	His	Asn	Asp	Pro	Gln	Asn	Thr	
			260					265					270			
ccg	cga	gcg	agc	tgg	cgt	agt	cac	ggt	aat	tta	ctg	ttt	acc	aac	tgg	864
Pro	Arg	Ala	Ser	Trp	Arg	Ser	His	Gly	Asn	Leu	Leu	Phe	Thr	Asn	Trp	
		275					280					285				
ctc	aac	tat	tac	gtc	tac	cag	atc	acg	cca	tac	gat	cta	cgg	cac	atg	912
Leu	Asn	Tyr	Tyr	Val	Tyr	Gln	Ile	Thr	Pro	Tyr	Asp	Leu	Arg	His	Met	
	290					295					300					
aat	cca	acg	ctg	gat	taa											930
Asn	Pro	Thr	Leu	Asp												
305					310											

<210> 2

<211> 309

<212> PRT

<213> Escherichia coli

145

150

155

160

# 5/11

<4	00>	2													
Me	t Pr	o Il	e Ar	g Val	l Pro	Ası	o Glu	ı Leı	ı Pro	Ala	Val	Asn	Phe	Leu	Arg
:	1			!	5				10	)				15	
				•											
Glu	ı Glı	ı Ası	n Val	l Phe	e Val	. Met	Thr	Thr	Ser	Arg	Ala	Ser	Gly	Gln	Glu
			20	)				25	<b>i</b>				30		
Ile	Arç	g Pro	Leu	Lys	Val	Let	lle	Leu	Asn	Leu	Met	Pro	Lys	Lys	Ile
		35	5				40					45			
Glu			ı Asn	Gln	Phe			Leu	Leu	Ser	Asn	Ser	Pro	Leu	Gln
	50	•		•		55					60				
	_			_	_										
		Ile	Gln	Leu	Leu	Arg	Ile	Asp	Ser		Glu	Ser	Arg	Asn	
65					70					75					80
D≖o	חות	C1	u i a	Tan	7	7	Dha	W	Coop	7	D's s	G2	2	<b>*1</b> -	<b>61</b>
FIO	wra	GIU	птз	ьеа 85	Asn	ASN	rne	Tyr	90	ASN	Pne	GIU	Asp		GIN
				0.5					90					95	
Asp	Gln	Asn	Phe	Asp	Gly	ī.en	Tle	Val	Thr	Glv	Δla	Pro	T.em	Glv	Len
			100		027	200		105		01,			110	Ory	Dea
											:	٠	,		
Val	Glu	Phe	Asn	Asp	Val	Ala	Tyr	Trp	Pro	Gln	Ile	Lys	Gln	Val	Leu
		115					120					125			
Glu	Trp	Ser	Lys	Asp	His	Val	Thr	Ser	Thr	Leu	Phe	Val	Cys	Trp	Ala
	130					135					140				
Val	Gln	Ala	Ala	Leu	Asn	Ile	Leu	Tyr	Gly	Ile	Pro	Lys	Gln	Thr	Arg

Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
165 170 175

Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser

Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
195 200 205

Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser 210 215 220

Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala 225 230 235 240

Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
245
250
255

Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
260 265 270

Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
275 280 285

Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
290 295 300

Asn Pro Thr Leu Asp

<210> 3

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
 Oligonucleotide metAfw

<400> 3

gatcccatgg ctccttttag tcattcttat

<210> 4

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide metArev

<400> 4

gatcgagctc agtactatta atccagcgtt ggattc

<210> 5

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide
GAPDHfw

<400> 5

gtcgacgcgt gaggcgagtc agtcgcgtaa tgc

33

<210> 6

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide
GAPDHrevII

<400> 6

gaccttaatt aagatctcat atgttccacc agctatttgt ta

42

<210> 7

<211> 37

<212> DNA

<213> Artificial Sequence

metAmutfwl

9/11

<220> <223> Description of Artificial Sequence: Oligonucleotide metAfw2 <400> 7 catggctcct tttagtcatt cttatattct aacgtag 37 <210> 8 <211> 47 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Oligonucleotide metArev2 <400> 8 acgcgtatgc atccagagct cagtactatt aatccagcgt tggattc 47 <210> 9 <211> 25 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Oligonucleotide

PCT.	EP2	0037	/ 0 1	0.0	<b>37</b>	R
$\mathbf{L} \cup \mathbf{L}$		000/	-	. v -	,,	u

WO	20	04	<b>/</b> N	3	5	61	7
W	2.0	<b>U</b>	, ,,	_ ,		<b>U</b>	•

<1	Λ	n	>	Q

nnncagatca cgccatacga tctac

25

<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleötide
metAmutrevl

<400> 10

gacgtaatag ttgagccagt tgg

23

<210> 11

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide metAmutfw2

<400> 11

nnnggtttga ttgtaactgg tgcg

24

<210> 12

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide metAmutrev2

<400> 12

aaagttctga tcctgaatat c